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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Nedim Fresko

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EXAMINER

ABEL JALIL, NEVEEN

ART UNIT

PAPER NUMBER

2165

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/821,468	Applicant(s) FRESKO ET AL.	
	Examiner NEVEEN ABEL JALIL	Art Unit 2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27, and 29-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
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| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. In response to Applicant's amendment filed on February 10, 2009, claims 1-31 are pending, where claims 1-27, and 29-31 are presetned for examination and claim 28 is withdrawn.
2. Applicant's response to the previously presented specification objection for clear definition on the meaning behind the claimed "computer readable medium", the specification has been amended to add examples of "computer readable storage medium" by disclosing statutory embodiments only, however, the preamble of claim 29 has not been amended to add "storage". It is also noted that Applicant's remarks have not included a clear statement of disavowal of non-statutory subject matter supporting the additions made. Both requests are respectfully needed.
3. Applicant's amendment has overcome the previously presented claim objections, and rejections under 35 USC 101 and 112, second.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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5. Claims 1-26, and 29-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Agesen et al. (U.S. Pub. No. 2001/0044856 A1).

As to claims 1, 15, and 29, Agesen et al. discloses a method in a data processing system having a program for allocating objects in a memory portion that includes a Young Generation and at least one Older Generation, said method comprising:

(a) determining whether at least one object should be allocated in said Young Generation in accordance with a first promotion policy exercised for promoting objects from said Young Generation to an Older Generation of said memory portion (See paragraph 0040-0041);

(b) determining a second promotion policy for said at least one object when said determining (a) determines that said at least one object should not be allocated in said Young Generation in accordance with said first promotion policy (See paragraph 0068, and see paragraph 0099); and

(c) storing said at least one object in said Young Generation in accordance with said second policy when said determining (b) determines the second promotion policy for said object (See paragraph 0102, and see paragraphs 0121-0123).

As to claim 2, Agesen et al. discloses wherein said determining (a) of whether at least one object should be allocated in accordance with a first promotion policy comprises:

determining whether said at least one object is used as temporary data (See paragraph 0102).

As to claim 3, Agesen et al. discloses wherein said determining (a) of whether at least one object should be allocated in accordance with a first promotion policy comprises:

determining whether said at least one object is garbage (See paragraph 0104).

As to claim 4, Agesen et al. discloses wherein said at least one object is can be garbage within an acceptable time period (See paragraph 0122, wherein it is well known in the art that the “time period” can be user or machine defined).

As to claim 5, Agesen et al. discloses wherein said determining (a) of whether at least one object should be allocated in accordance with a first promotion policy comprises:

determining whether said at least one object is garbage (See paragraph 0104).

As to claim 6, Agesen et al. discloses wherein said determining of whether said at least one object is garbage determines whether at least 50% of said at least one object is garbage (See paragraph 0117, wherein the percentage is well known in the art to be user defined or machine specific).

As to claims 7, and 31, Agesen et al. discloses wherein said determining (a) of whether an object should be allocated in accordance with a first promotion policy comprises:

determining whether system code is allocating said object; and

wherein said method further comprises:

selecting a second promotion policy that postpones the promotion of said at least one object with respect to other objects allocated in accordance with said first promotion policy (See paragraphs 0039-0041).

As to claim 8, Agesen et al. discloses wherein of said determining (a) of whether an object should be allocated in accordance with a first promotion policy comprises:

determining whether one or more of the following operations are being performed:

loading a class, parsing a file that represents a class, dynamic compilation, and a call to a library function that generates temporary data (See paragraph 0036).

As to claim 9, Agesen et al. discloses wherein said class is Java TM compliant class represented in a class file, said dynamic compilations are performed in Java TM compliant run time environment, and said library function is Java TM compliant library method (See paragraph 0011, and see paragraph 0034).

As to claim 10, Agesen et al. discloses wherein said Java TM compliant library method is associated with concatenation of Java TM strings (See paragraph 0057).

As to claim 11, Agesen et al. discloses wherein said (c) allocating of said at least one object in said Young Generation in accordance with said second promotion policy comprises:

allocating said at least one object with a header that indicates said second policy (See paragraph 0087 and paragraph 0101)

As to claims 12, 20, and 30, Agesen et al. discloses wherein said header includes a preemption indicator that indicates a garbage collection count should be preempted and said at least one object should not be promoted to said next generation (See paragraph 0104).

As to claims 13, and 21, Agesen et al. discloses wherein said header includes a preemption indicator and a preemption value;

said preemption indicator indicates that a garbage collection count should be preempted (See paragraph 0106);

said preemption value provides a preemptive garbage collection count that is used instead of a garbage collection count (See paragraph 0105, and paragraph 0122).

As to claims 14, and 22, Agesen et al. discloses wherein said header provides a garbage collection count to determine when said at least one object should be promoted from said Young Generation to said Older Generation (See paragraph 0105).

As to claim 23, Agesen et al. discloses further comprising:
a garbage collector that reads said header and promotes said at least one object in accordance with said header (See paragraph 0083).

As to claim 24, Agesen et al. discloses wherein said garbage collector delays or avoids promotion of said at least one object with respect to objects allocated with said first allocator (See paragraph 0087).

As to claim 25, Agesen et al. discloses wherein said computer system is a virtual machine (See paragraph 0034).

As to claim 26, Agesen et al. discloses wherein said computer system is a Java TM compliant virtual machine (See paragraph 0034).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Agesen et al. (U.S. Pub. No. 2001/0044856 A1) in view of Hayward (U.S. Pub. No. 2003/0187888).

As to claim 27, Agesen et al. discloses does not explicitly disclose wherein said computer system is provided for a handheld, an embedded, or mobile device.

Hayward teaches wherein said computer system is provided for a handheld, an embedded, or mobile device in paragraph 0007.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to have an electronic device be a mobile telephone running a Java based application which require garbage collection since mobile computing devices are well known and prevalent in the art and they provide mobility and accessibility.

Response to Arguments

8. Applicant's arguments filed on 2/10/09 have been fully considered but they are not persuasive.

Applicant's argument that "Agesen does teach changes in policy but does not teach utilizing more than one policy to determine whether an object should be stored to a Young Generation or to an Old Generation of a memory portion" is noted but not found to be persuasive.

Agesen's teachings of modifying the garbage collection policy as suggested in paragraphs 0024, and 0121 shows that under the current cycle, various policies are applicable accordingly to certain configurable tenuring rules exist. In addition to the disclosure of two policies existing simultaneously in paragraphs 0008, and 0017, the determination of what policy the object falls under is taught in paragraphs 0020, and 0022 (policy application on per object category).

The Independent claims have not made any clear distinction on what constitutes the "determination" to hold back objects or what is defined by the second policy. Agesen teaches customization and adaptability. Therefore, they are given the broadest reasonable rejection and the rejection under Agesen is maintained.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on 571-272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Neveen Abel-Jalil

Primary Examiner

March 9, 2009

/Neveen Abel-Jalil/

Primary Examiner, Art Unit 2165